



Published to advance the Science of cold-blooded vertebrates

1921 FISH NOTES FROM ORIENT,
LONG ISLAND

Raja eglanteria. Clear-nosed Skate. April 30, one adult.

Brevoortia tyrannus. Bunker. April 14, one adult.

Scomberesox saurus. Skipper. November 3, two 14 inches in total length.

Stenesthes chrysops. Porgy. May 7, several small adults.

Cynoscion regalis. Weakfish. April 25, two 14 inches in total length.

Poronotus triacanthus. Butterfish. April 21, one adult.

Trachurops crumenophthalmus. Goggle-eyed Scad. August 1, one $6\frac{3}{4}$ inches in total length.

Spheroides maculatus. Swellfish. May 16, two adults.

Mola mola. Headfish. August 9. This specimen was taken in a small fish trap set in sixteen feet of water on the west side of the breakwater in Greenport harbor. The fish was taken by Mr. Burt Raynor of Greenport and measurements recorded by the writer. Weight, 250 pounds. Four feet in total length. Expansion from tip to tip of fins sixty-two inches. Depth of fins, each, twenty inches. Eye, two and one-half inches in diameter. Color: silvery with a broad dark band near caudal. Fish was very sluggish in the trap, staying quietly in a corner. It is the first local record known.

Pholis gunnellus. Rock Eel. June 20, one. Recorded abundant on June 8.

Otherwise from Mola all the records are from the Sound at Orient.—ROY LATHAM, *Orient, N. Y.*

A LIST OF HAWAIIAN FISHES

The following is a list of the species contained in the collection of the Academy of Natural Sciences of Philadelphia. Since my list in 1900 a number of species have been received from the U. S. Fish Commission in 1904, besides several small accessions from other sources.

Elops hawaiiensis Regan; *Etrumeus micropus* (Schlegel); *Anchovia purpurea* (Fowler); *Synodus japonicus* (Houttuyn); *Saurida gracilis* (Quoy and Gaimard); *Centrobranchus choerocephalus* Fowler; *Conger marginatus* Valenciennes; *Congermuraena boxersii* (Jenkins); *Atopichthys nuttalli* Fowler; *Leiuranus semicinctus* (Lay and Bennett); *Ophichthus triserialis* (Kaup); *Gymnothorax meleagris* (Shaw and Nodder); *G. undulatus* (Lacepede); *G. batuensis* (Bleeker); *G. pictus* (Ahl); *Echidna nebulosa* (Ahl); *E. polyzona* (Richardson); *Uropterygius marmoratus* (Lacepede); *Aulostomus chinensis* (Linn.); *Fistularia petimba* Lacepede; *Parexocoetus brachypterus* (Richardson); *Exocoetus volitans* Linn.; *Cypselurus simus* Valenciennes; *Belone platyura* Bennett; *Strongylura indica* (Le Sueur); *Hyporhamphus pacificus* (Steindachner); *Hemiramphus brasiliensis* (Linn.); *Hepsetia insularum* (Jordan and Evermann); *Mugil cephalus* Linn.; *Neomyxus chaptalii* (Eyedoux and Souleyet); *Sphyræna commersonii* Cuvier; *S. helleri* Jenkins; *Myripristis chryseres* (Jordan and Evermann); *M. multiradiatus* Gunther; *M. murdjan* (Forsk.); *M. argyrommus* Jordan and Evermann; *Holotrachys lima* (Valenciennes); *Flammeo samara* (Forsk.); *Holocentrus diadema* Lacepede; *H. xantherythrus* Jordan and Evermann; *H. lacteoguttatus* (Cuvier); *H. ensifer* Jordan and Evermann; *Euthynnus alletteratus* (Rafinesque); *Selar crumenophthalmus* (Bloch) *Caranx forsteri* Cuvier; *Cory-*

phaena hippurus Linn.; *Kuhlia marginatus* (Cuvier); *Amia frenata* (Valenciennes); *A. maculifera* (Garrett); *A. menesema* (Jenkins); *Foa brachygramma* (Jenkins); *Epinephelus quernus* Seale; *E. phaeostigmaeus* Fowler; *Odontanthias fuscipinnis* (Jenkins); *Priacanthus cruentatus* (Lacepede); *P. meeki* Jenkins; *Aprion microlepis* (Bleeker); *Pagrosomus auritus* (Schneider); *Monotaxis grandoculis* (Forsk.); *Polydactylus searfilis* (Valenciennes); *Cirrhitus marmosatus* Lacepede; *Paracirrhites forsteri* (Schneider); *P. arcatus* (Cuvier); *P. cinctus* (Gunther); *Upeneoides arge* (Jordan and Evermann); *Upeneus multifasciatus* (Quoy and Gaimard); *U. bifasciatus* (Lacepede); *U. porphyreus* (Jenkins); *U. chryserydros* (Lacepede); *U. taeniatus* Kner; *U. pleurostigma* Bennett; *U. macronemus* (Lacepede); *Mulloides auriflamma* (Forsk.); *Pomacentrus jenkinsi* Jordan and Evermann; *P. nigricans* (Lacepede); *Abudefduf sordidus* (Forsk.); *A. abdominalis* (Cuvier); *A. sindonis* Jordan and Evermann; *Dascyllus trimaculatus* (Ruppell); *Anampses cuvier* Quoy and Gaimard; *Stethojulis albovittata* (Lacepede); *S. axillaris* (Quoy and Gaimard); *Macropharyngodon geoffroyi* (Quoy and Gaimard); *Halichoeres lao* Jenkins; *Coris venusta* Vaillant and Sauvage; *C. ballieni* Vaillant and Sauvage; *Julis pulcherrima* (Gunther); *J. gaimard* (Quoy and Gaimard); *J. flavovittata* (Bennett); *Cheilio inermis* (Forsk.); *Thalassoma duperrey* (Quoy and Gaimard); *T. purpureum* (Forsk.); *T. trilobata* (Lacepede); *Gamphosus varius* Lacepede; *G. tricolor* Quoy and Gaimard; *Cheilinus hexagonatus* Gunther; *C. bimaculatus* Valenciennes; *Novaculichthys virens* (Valenciennes); *N. taeniourus* (Lacepede); *Hemipteronotus pentadactylus* (Linn.); *H. melanopus* (Bleeker); *Iniistius pavoninus* (Valenciennes); *I. niger* (Steindachner); *Cymolutes praetextatus* (Quoy and Gaimard); *Calotomus sandvicensis* (Valenciennes); *Callyodon dubius* (Bennett); *C. perspicillatus* (Steindachner); *Forcipiger longiros-*

tris (Broussonet); *Chaetodon setifer* Bloch; *C. fasciatus* Forskal; *C. unimaculatus* Bloch; *C. miliaris* Quoy and Gaimard; *C. ornatissimus* Cuvier; *C. quadrimaculatus* Gray; *Zanclus canescens* (Linn.); *Hepatus achilles* (Shaw); *H. olivaceus* (Schneider); *H. annularis* (Valenciennes); *H. atrimentatus* (Jordan and Evermann); *H. leucopareius* (Jenkins); *H. matoides* (Valenciennes); *H. triostegus* (Linn.); *H. guttatus* (Schneider); *Ctenochaetus striatus* (Quoy and Gaimard); *Acanthurus unicornis* (Forskal); *A. brevirostris* (Cuvier); *A. lituratus* (Schneider); *Balistes bursa* Schneider; *Balistapus rectangulus* (Schneider); *Canthidermis rotundatus* (Proce); *Cantherines sandwichiensis* (Quoy and Gaimard); *Monacanthus spilosoma* Bennett; *Spheroides hypselogenion* (Bleeker); *Ranzania truncata* (Retzius); *Scorpaenopsis gibbosus* (Schneider); *Sebastapistes strongius* (Cuvier); *Caracanthus maculatus* Gray; *Cephalacanthus orientalis* (Cuvier); *Malacanthus hoedtii* Bleeker; *Eleotris fusca* (Schneider); *Asterropteriæ semipunctatus* Ruppell; *Eviota epiphanes* (Jenkins); *Gnatholepis anjerensis* (Bleeker); *Mapo fuscus* (Ruppell); *Awaous stamineus* (Eydux and Souleyet); *A. vittatus* Valenciennes; *Gobionellus papuensis* (Valenciennes); *Kelloggella oligolepis* Jenkins; *Sicydium stimpsoni* Gill; *Echeneis remora* Linn.; *Enneapterygius atriceps* (Jenkins); *Cirripectes variolosus* (Valenciennes); *C. brevis* (Kner); *Alticus marmoratus* (Bennett); *A. gibbifrons* (Quoy and Gaimard); *Salarias edentulus* (Schneider); *Petroscirtes filamentosus* (Valenciennes); *Platophrys pantherinus* (Ruppell); *Engyproson hawaiiensis* Jordan and Evermann; *Brotula multibarbata* Schlegel; *Antennarius commersonii* (Lacepede).—HENRY W. FOWLER, Philadelphia, Pa.

REPTILE NOTES*

During the past fifteen months many minor notes on the behavior and occurrence of various reptiles and

*Published by permission of Field Museum of Natural History.

amphibians have accumulated. It seems well at this time to put some of the more important ones in print.

Thamnophis sirtalis parietalis.

Ruthven's description of this species gives central Iowa as about the eastern limit of its distribution. His idea seems to be that specimens from localities much farther east are all to be classed as aberrant forms of *Thamnophis sirtalis*. It is, of course, difficult to determine the distribution of these forms from a study of alcoholic specimens. The scale formula is the same in both. The basic color pattern is also the same and, when the red markings between the scales have disappeared, there is left no distinguishing character.

July 26, 1921, a very large specimen (36 inches in total length) was captured at North Rose, N. Y. This specimen has the general color a greenish drab, but, along the lateral stripe some of the interspaces between the scales are brick red.

Since that time about eight specimens from the vicinity of Chicago, which have more or less red on the skin between the scales have passed through our hands. In most of them this color is confined to the region of the lateral stripe and to the skin between the scales. One specimen, however, taken at Dune Park, Indiana, in March or April, 1922, by L. L. Walters, has the red color extending upward two or three scale rows above the lateral stripe and also extending on the surface of the scales to such an extent that it gives a decidedly reddish tint to the sides of the neck when the skin is not at all distended. In all other respects this snake conforms to the description of *Thamnophis sirtalis parietalis* as given by Ruthven, and in the absence of other evidence, we believe it is that species.

In this connection, it may be interesting to record that we have two specimens of *Thamnophis radix*, which show an approximation to the color of *Thamnophis sirtalis parietalis*. In these red *radix*, the color is not so closely restricted to the skin between the scales but covers a large part of many of the scales. In many places where the scales are red the skin be-

tween them is not red or only partly red. These specimens were collected close to the city limits of Chicago.

Thamnophis radix.

This is a very common snake in the vicinity of Chicago. We have not yet actually taken it in Indiana, but it is very common on the west side of Wolf Lake a few hundred feet from the Indiana line. There are two distinct color patterns, which are about equally common. In one the lateral stripe is confined to the third and fourth rows of scales on the forward part of the body and to the third row the rest of the way.

In the other form, there is more or less ticking of light color on the scales above and below the lateral stripe. In many specimens this is so arranged as to make it appear that the stripe is on the second, third, fourth and fifth rows of scales. At the region where the other form has the lateral stripe reduced to the third row of scales this one has it on the upper half of the third and the lower half of the fourth. At first this might be considered as a tendency toward *Thamnophis butleri* but none of our specimens shows any tendency to a reduction of the scale rows. The scale rows are 21 in all cases.

Blanding's Turtle, *Emys blandingii*

Blanding's Turtles were observed mating October 11, 1921, and May 22, 1922. This species is quite common in all parts of the Chicago area.

Spotted Turtle, *Clemmys guttata*

Spotted Turtles are very numerous in the dune ponds between Gary, Indiana, and Michigan City, Indiana. In a drainage ditch at Dune Park, Indiana, some condition of the water stains the shells of all the turtles so that the parts which are usually bright yellow take on a dark mahogany color. The surface of these shells is usually highly iridescent in life.

In the collections of Field Museum are several specimens labeled *Clemmys guttata* which differ from typical ones of that species in having the dorsal plates

strongly striate. Many of these specimens are proportionately much broader than typical ones.

Liopeltis vernalis.

A small snake which was identified as *Virginia valeriae* was captured in Budlong's Woods at the north edge of Chicago early in 1922. A more recent careful examination of the specimen in alcohol shows it to be a Green Snake.

The light brown color, about the same tone as pale specimens of *Storeria dekayi* gave no clue to the identity of the snake. To explain the color we may suppose that the green is the result of a mixture of blue and yellow and that, in this case, as the result of partial albinism, the blue was left out. If this is the case, it is possible that we may be able to find an occasional bright blue snake of this species.

Leather Snake, *Natrix septemvittata*

There are some old abandoned quarries a few miles southwest of Chicago, which are well stocked with this snake. They live in crevices in the piles of rubbish and waste stone, mainly at the water line. When the water is warm they may be seen in large numbers with only the head out of water and with the rear end firmly anchored around a handy stone. All the specimens which we have captured have given abundant evidence that they eat crawfish, especially shedders, but we have seen no indication that they take any other food.

Storeria dekayi

Several specimens of this species were found under logs in woods at the north side of Chicago. The boy who caught them also brought in the abnormal *Liopeltis vernalis*, many other Green Snakes and fifty or more Garter Snakes as his afternoon's catch.

Storeria occipito-maculata

A single specimen was found under a log near the Desplaines River in the village of River Forest, Ill.
—ALFRED C. WEED, *Field Museum of Natural History.*

NOTES ON DADE CO. SALIENTIA

During May, 1922, while accompanying Dr. J. K. Small of the New York Botanical Garden on a trip by auto to Cape Sable, Fla., the writer heard the unmistakable rattling call of *Acris gryllus* at different points along the Ingraham Highway, between a point just north of Royal Palm Hammock and a point where the road branches off to Flamingo.

This latter locality is about seven or eight miles northeast of East Cape (Sable), the southernmost point on the mainland of the United States. Other frogs and toads were seen and heard on this trip, as per the following list:

Pseudacris ocularis—heard at Homestead and in rain-ditches along the road—to a little beyond Royal Palm Hammock.

Hyla squirella—saw several in Hammock on shell mound about 5 miles northeast of Cape Sable. Heard their calls at Royal Palm Hammock.

Rana sphenocephala—saw numbers along the shore of the brackish canal on the right of the Ingraham Highway, between Royal Palm Hammock and Cape Sable.

Rana grylio—Heard at Royal Palm Hammock.

Gastrophryne carolinensis—Heard from a ditch beside the road, Royal Palm Hammock.

Bufo terrestris—Singing at Royal Palm Hammock, and in wet places northeast to Homestead.

Bufo quercicus—Heard them "peeping" along the road between Homestead and Royal Palm Hammock.

Scaphiopus holbrookii—ran over one at Homestead, in the evening, on the return trip.

Eleutherodactylus ricordii—Heard this frog, and saw several very small young ones, on the shell mounds in the Hammock about 6 miles northeast of Cape Sable.—RICHARD DECKERT, *Miami, Fla.*

PRICE FIVE CENTS

EDITED by J. T. NICHOLS, American Museum of Natural History.

